

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

BEST AVAILABLE COPY

(51) International Patent Classification <sup>7</sup> : G06F 19/00, 17/30		A3	(11) International Publication Number: WO 00/33231
			(43) International Publication Date: 8 June 2000 (08.06.00)
(21) International Application Number: PCT/US99/28085 (22) International Filing Date: 23 November 1999 (23.11.99) (30) Priority Data: 09/199,611          25 November 1998 (25.11.98)    US (71) Applicant (for all designated States except US): NEXSYS ELECTRONICS [US/US]; 667 Folsom Street, San Francisco, CA 94107 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): KILLCOMMONS, Peter, M. [US/US]; 132 Beaumont, San Francisco, CA 94107 (US). FOARD, Lawrence, IV [-US]; 43 Vicksburg Lane, San Francisco, CA 94114 (US). (74) Agents: FAHMI, Tarek, N. et al.; Blakely, Sokoloff, Taylor & Zafman LLP, 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  Published With international search report.  (88) Date of publication of the international search report: 21 September 2000 (21.09.00)	
(54) Title: MEDICAL NETWORK SYSTEM AND METHOD FOR TRANSFER OF INFORMATION			
(57) Abstract			
<p>The assembly and communication of multimedia information from a variety of modalities to remote users with improved control is provided for by the combined use of a browser enhancement module, such as a plug-in or ActiveX control, and a server. The server includes a data interface for acquiring the multimedia data and a storage unit for receiving and storing the data. An assembly unit in the server gathers selected data to form an e-mail package in response to instructions from a remote user unit. The server further includes a processing unit to encode and compress the data prior to packaging and an e-mail server to send the package to the remote user unit or another designated user unit. Transfer instructions for the server may be provided by the remote user unit through a browser and the browser enhancement module. The browser enhancement module is therefore configured to request a file from the server, to decompress and decode received files and to transfer such files along with a user interface to a display associated with the remote user unit. The browser enhancement module is further adapted to send instructions to the server to assemble and to e-mail selected data from a file to another user unit.</p>		<pre> graph TD     12[MODALITY 12] --&gt; 14[DECOMIZER 14]     14 --&gt; 22[SERVER 22]     20[SECOND USER UNIT 20] -.-&gt; 22     18[MODALITY 18] --&gt; 50[FIRST USER UNIT 50]     50 --&gt; 22     subgraph 50 [FIRST USER UNIT 50]         52[BROWSER 52]         54[ENHANCEMENT MODULE 54]     end   </pre>	

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/28085

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F19/00 G06F17/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>PRUNA S ET AL: "Black Sea Telediab: diabetes computer system with communication technology for Black Sea region"</p> <p>INFORMATION TECHNOLOGY APPLICATIONS IN BIOMEDICINE. ITAB '97. PROCEEDINGS OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY REGION 8 INTERNATIONAL CONFERENCE (CAT.NO.97TH8342), PRAGUE, CZECH REPUBLIC, 7 - 9 September 1997, pages 11-13, XP002139925</p> <p>1997, New York, NY, USA, IEEE, USA ISBN: 0-7803-4318-2</p> <p>page 11, line 1 -page 12, line 7; figures 1,2</p> <p style="text-align: center;">-/-</p>	<p>1-4, 16, 22, 37, 41, 43, 45, 50, 58, 61, 62</p>



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

### \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

9 June 2000

Date of mailing of the international search report

27/06/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3018

Authorized officer

Schenkels, P

## INTERNATIONAL SEARCH REPORT

Inter. Appl. Application No.

PCT/US 99/28085

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PIRA R S ET AL: "Supporting asynchronous telemedicine: multimedia mail vs. the World Wide Web vs. replicated databases" CONFERENCE PROCEEDINGS. IEEE CANADIAN CONFERENCE ON ELECTRICAL AND COMPUTER ENGINEERING, WATERLOO, ONT., CANADA, 24-28 MAY 1998, pages 341-344 vol.1, XP002139926 1998, New York, NY, USA, IEEE, USA ISBN: 0-7803-4314-X page 341, left-hand column, line 1 -page 344, right-hand column, line 8; figures 1-4	1-4,16, 22,37, 41,43, 45,50, 61,62
Y	BITTI M G ET AL: "A WWW-BASED DISTRIBUTED SYSTEM FOR MEDICAL DATA ANALYSIS AND 3D RECONSTRUCTION" COMPUTER ASSISTED RADIOLOGY. PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM, XX, XX, 1 June 1996 (1996-06-01), pages 345-350, XP002057164 page 345, line 1 -page 350, line 9; figures 1,2	58
A	DAYHOFF R E ET AL: "Mechanisms for exchange of image data to support distant medical consultation" SEVENTEENTH ANNUAL SYMPOSIUM ON COMPUTER APPLICATIONS IN MEDICAL CARE. PATIENT-CENTERED COMPUTING, PROCEEDINGS OF SEVENTEENTH ANNUAL SYMPOSIUM ON COMPUTER APPLICATIONS IN MEDICAL CARE, WASHINGTON, DC, USA, 30 OCT.-3 NOV. 1993, pages 808-812, XP000914151 1994, New York, NY, USA, McGraw-Hill, USA ISBN: 0-07-001502-3 page 808, left-hand column, line 1 -page 812, left-hand column, line 8	1
A	HAUFE G ET AL: "PACS at work: a multimedia e-mail tool for the integration of images, voice and dynamic annotation" PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON COMPUTER AND COMMUNICATION SYSTEMS FOR IMAGE GUIDED DIAGNOSIS AND THERAPY, PROCEEDINGS OF CAR'96: COMPUTER ASSISTED RADIOLOGY-10TH INTERNATIONAL SYMPOSIUM, PARIS, FRANCE, June 1996 (1996-06), pages 417-420, XP000914152 1996, Amsterdam, Netherlands, Elsevier, Netherlands ISBN: 0-444-82497-9 page 417, line 1 -page 419, line 15	1

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☒ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**

N N